

## DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA-2018-0010, Notice 1]

Spartan Motors USA, Inc., Receipt of Petition for Decision of Inconsequential

**Noncompliance** 

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

**ACTION:** Receipt of petition.

SUMMARY: Spartan Motors USA, Inc (Spartan), has determined that certain model year (MY) 2015-2019 Spartan Specialty MM and K2 motorhome chassis do not fully comply with Federal Motor Vehicle Safety Standard (FMVSS) No. 121, *Air Brake Systems*. Spartan filed a noncompliance report dated December 18, 2017, subsequently petitioned NHTSA on January 15, 2018, for a decision that the subject noncompliance is inconsequential as it relates to motor vehicle safety. This document announces receipt of petition and offers the opportunity for public comment.

DATES: The closing date for comments on the petition is [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** Interested persons are invited to submit written data, views, and arguments on this petition. Comments must refer to the docket number cited in the title of this notice and may be submitted by any of the following methods:

Mail: Send comments by mail addressed to the U.S. Department of
Transportation, Docket Operations, M-30, West Building Ground Floor, Room
W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590.

- Hand Delivery: Deliver comments by hand to the U.S. Department of
  Transportation, Docket Operations, M-30, West Building Ground Floor, Room
  W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590. The Docket
  Section is open on weekdays from 10 am to 5 pm except for Federal Holidays.
- Electronically: Submit comments electronically by logging onto the Federal
   Docket Management System (FDMS) website at <a href="https://www.regulations.gov/">https://www.regulations.gov/</a>.
   Follow the online instructions for submitting comments.
- Comments may also be faxed to (202) 493-2251.

Comments must be written in the English language, and be no greater than 15 pages in length, although there is no limit to the length of necessary attachments to the comments. If comments are submitted in hard copy form, please ensure that two copies are provided. If you wish to receive confirmation that comments you have submitted by mail were received, please enclose a stamped, self-addressed postcard with the comments. Note that all comments received will be posted without change to <a href="https://www.regulations.gov">https://www.regulations.gov</a>, including any personal information provided.

All comments and supporting materials received before the close of business on the closing date indicated above will be filed in the docket and will be considered. All comments and supporting materials received after the closing date will also be filed and will be considered to the fullest extent possible.

When the petition is granted or denied, notice of the decision will also be published in the **Federal Register** pursuant to the authority indicated at the end of this notice.

All comments, background documentation, and supporting materials submitted to the docket may be viewed by anyone at the address and times given above. The documents may also

be viewed on the Internet at <a href="https://www.regulations.gov">https://www.regulations.gov</a> by following the online instructions for accessing the dockets. The docket ID number for this petition is shown in the heading of this notice.

DOT's complete Privacy Act Statement is available for review in a **Federal Register** notice published on April 11, 2000, (65 FR 19477-78).

## SUPPLEMENTARY INFORMATION:

**I. Overview:** Spartan has determined that certain MY 2015-2019 Spartan Specialty MM and K2 motorhome chassis do not fully comply with paragraph S5.1.2.1 of FMVSS No. 121, *Air Brake Systems* (49 CFR 571.121). Spartan filed a noncompliance report dated December 18, 2017, pursuant to 49 CFR Part 573, *Defect and Noncompliance Responsibility and Reports*. Spartan subsequently petitioned NHTSA on January 15, 2018, for an exemption from the notification and remedy requirements of 49 U.S.C. Chapter 301 on the basis that this noncompliance is inconsequential as it relates to motor vehicle safety, pursuant to 49 U.S.C. 30118(d) and 30120(h) and 49 CFR part 556, *Exemption for Inconsequential Defect or Noncompliance*.

This notice of receipt of Spartan's petition is published under 49 U.S.C. 30118 and 30120 and does not represent any agency decision or other exercise of judgement concerning the merits of the petition.

- **II. Vehicles Involved:** Approximately 414 MY 2015–2019 Spartan Specialty MM and K2 motorhome chassis manufactured between February 12, 2014, and December 11, 2017, are potentially involved.
- **III.** Noncompliance: Spartan described the noncompliance as the combined volume of air in the service and supply reservoirs in the air brake system does not meet the required minimum of

twelve times the combined volume of air from all service brake chambers as specified in paragraph S5.1.2.1 of FMVSS No. 121.

- **IV. Rule Requirements:** paragraph S5.1.2.1 of FMVSS No. 121, titled "Air Brake Systems" includes the requirements relevant to this petition. The combined volume of all service reservoirs and supply reservoirs shall be at least 12 times the combined volume of all service brake chambers.
- V. Summary Spartan's of Petition: Spartan described the subject noncompliance and stated its belief that the noncompliance is inconsequential as it related to motor vehicle safety.

In support of its petition, Spartan submitted the following reasoning:

1. Paragraph S5.1.2.1 of FMVSS No. 121, requires the combined volume of all service reservoirs and supply reservoirs to be at least 12 times the combined volume of all service brake chambers. The chassis affected by this condition are equipped with a T-24 brake chamber on the steer axle, T-30 brake chamber on the drive axle and T-16 brake chamber on the tag axle. In using the values in Table V of FMVSS No. 121, the cumulative air capacity of these brake chambers would be 404 cubic inches. Multiplying by 12, the needed air reservoir capacity would be 4848 cubic inches. To better illustrate the issue, refer to the table below:

Brake Chamber Size	FMVSS No. 121 Cu.In. (Table V)	Number of Chambers Total Cu. In.	Total Cu. In.
T-24	67	2	134
T-30	89	2	178
T-16	46	2	92

Total Chamber Cu. In.	404
Required Air Reservoir Capacity (using 12X	
Multiplier) Cu. In.	4848

Spartan Actual Reservoir Capacity (Cu. In.)	4674
Additional Capacity Needed (Cu. In.)	174

Cubic Inch - Cu. In.

In paragraph S5.1.1 of FMVSS No. 121, the vehicle is to be equipped with an air compressor of sufficient capacity to increase air pressure in the supply and service reservoirs from 85 psi to 100 psi when the engine is operating at the vehicle manufacturer's maximum recommended revolutions per minute (r.p.m.) within a time, in seconds, determined by the quotient (actual reservoir capacity x 25)/required reservoir capacity). In using this equation, vehicles subject to the condition represented in the table above, the air pressure would be required to go from 85 psi to 100 psi within 24 seconds (4674\*25)/4848). Using the same equation and the required air reservoir capacity of 4848 cubic inches, the air pressure would need to increase from 85 psi to 100 psi within 25 seconds. Vehicles subject to the condition that has resulted in the non-compliance to paragraph S5.1.2.1 could increase air pressure from 85 psi to 100 psi in less than 6 seconds, well within the requirement of 25 seconds. Further, vehicles subject to this condition have a cut in pressure set at, or greater than, the minimum requirement of 100 psi.

The impact of having 3.5 percent less air reservoir capacity than required, the difference in the cut in pressure requirement of only 1 second would appear to have an adverse consequence of a slight increase in air compressor cycling. However, this would be dependent on application of the service brakes.

Motorhomes have a similar duty cycle to that of a tractor-trailer where they are driven at highway speeds with infrequent brake applications during such drives.

Motorhomes also are largely driven from owner residences to campground locations throughout the traveling season.

Given these brake applications would appear to be less frequent than those in stop and go applications. The lower than required capacity, with the one second difference time to increase air pressure, may not be noticeable by the driver and would not impact the braking performance of the vehicle.

2. Air System Warning: The completed motorhomes subject to this condition are equipped with two air gauges that monitor the air system pressure in both system 1 and system 2. In addition to the air gauges, there are both a warning light and audible alarm to alert the driver in the event of a low air condition.

In conclusion, Spartan stated that the actual air reservoir capacity in the affected motorhome chassis may be 3.5 percent less (174 cubic inches) than the calculated required amount. However, due to the duty cycle of a motorhome and the air compressor cycling, that is well within the required time using the equation from FMVSS No. 121, Spartan believes the noncompliance is inconsequential as it relates to motor vehicle safety. The less than required capacity does not appear to impact vehicle braking performance (e.g. stopping distance, brake application, and release timing). The completed vehicles are equipped with dual air gauges, a visual and audible warning system to alert the driver to a loss of air in the air brake system. Given the aforementioned, Spartan expressed the belief that the subject noncompliance is inconsequential as it relates to motor vehicle safety, and that its petition to be exempted from providing notification of the noncompliance, as required by 49 U.S.C. 30118, and a remedy for the noncompliance, as required by 49 U.S.C. 30120, should be granted.

NHTSA notes that the statutory provisions (49 U.S.C. 30118(d) and 30120(h)) that

permit manufacturers to file petitions for a determination of inconsequentiality allow NHTSA to

exempt manufacturers only from the duties found in sections 30118 and 30120, respectively, to

notify owners, purchasers, and dealers of a defect or noncompliance and to remedy the defect or

noncompliance. Therefore, this decision only applies to the subject vehicles that Spartan no

longer controlled at the time it determined that the noncompliance existed. However, the

granting of this petition does not relieve vehicle distributors and dealers of the prohibitions on

the sale, offer for sale, or introduction or delivery for introduction into interstate commerce of

the noncompliant vehicles under their control after Spartan notified them that the subject

noncompliance existed.

**Authority:** (49 U.S.C. 30118, 30120: delegations of authority at 49 CFR 1.95 and 501.8)

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Director, Office of Vehicle Safety Compliance.

Billing Code 4910-59-P

[FR Doc. 2019-09752 Filed: 5/10/2019 8:45 am; Publication Date: 5/13/2019]